

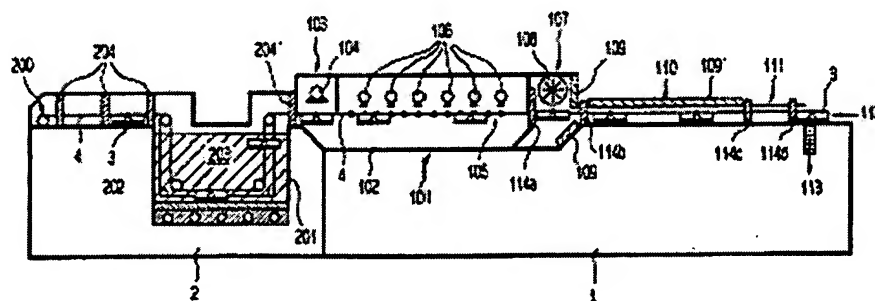
C. APPLICANT'S COMMENTS

Independent Claim 1 has been amended to have the following features:

1. (Currently Amended) A dry-wet thermal management system, comprising:
a chassis having a dry chamber and a spray chamber, at least one dry electronic card positioned within said dry chamber and at least one wet electronic card positioned within said spray chamber; and
a spray unit within said spray chamber for applying coolant to said at least one wet electronic card.

The Applicant has amended independent Claim 1 to clarify that dry electronic cards are positioned within the dry chamber and that the wet electronic cards are positioned within the wet chamber. None of the references cited teach the features of independent Claim 1.

Leicht (U.S. Patent No. 5,181,648) merely teaches a “method and apparatus for vapor phase soldering and cleaning products”. Leicht simply does not teach the usage of a dry chamber and a spray chamber for receiving corresponding electronic cards that are active – much less thermally manages active heat producing cards. First, Leicht merely is “cleaning” cards. Second, the cards are inactive – i.e. not producing heat so there is no thermal management required. Third, there are no distinct chambers in Leicht since it is a continuous cleaning process. Below is an exemplary figure from Leicht illustrating the continuous cleaning process.



Rodi et al. (EP 0297308) merely teaches a control cabinet that has a first region (1) and a second region (2). However, none of the regions in Rodi are for spray cooling of electronic cards. In fact, the first region (1) is openly exposed to the environment. The second “region (2) is [to] proof against water spray and dust ... [i]n this region, the heated losses are dissipated by emission through the outer walls.” (Rodi et al., Abstract) In fact, the “[c]omponents with higher

heat emissions are arranged in [the first] region (1) ... [where] [t]heir heat is dissipated by a fan (4), which introduces ambient air into the upper part of this region so that the temperature in this region essentially corresponds to the environment temperature.” (Rodi et al., Abstract)

Furthermore, there simply is no suggestion or motivation to one skilled in the art of the present invention to combine Leicht with Rodi.

Inaba et al. (JP 56-133544) merely teaches a *condenser* that is not capable of thermally managing any electronic cards. First, there is no spray cooling of electronic cards in Inaba. Second, there are no separate chambers within Inaba since the condenser teaches a continuous flow of the airflow of ambient air. There is simply no suggestion or motivation to combine Inaba with Rodi. Not only does Inaba not teach the elements of the present claims, Inaba is also non-analogous to the present invention as Inaba is a “condenser” and therefore not reasonably related to the present invention (thermal manager of electronic cards). In addition, Inaba does not solve any problem reasonably related to the problem being solved by the present invention.

The Applicant respectfully submits that the references cited do not teach or suggest the features of independent Claim 1 or its respective dependent claims. The Applicant respectfully requests withdrawal of the rejection.

D. SUPPLEMENTAL IDS AND U.S. PATENT NO. 6,597,569


The Applicant has included a Supplemental IDS along with a copy of U.S. Patent No. 6,597,569 to Unrein which was cited in U.S. Serial No. 10/953,505 (a divisional from the present application) which the present Examiner found. While the Applicant assumes that the Examiner is aware of the ‘569 patent, the Applicant is including the Supplemental IDS to have the Examiner verify the same.

E. CONCLUSION

In light of the foregoing amendments and remarks, early reconsideration and allowance of this application are most courteously solicited. Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is

respectfully asked that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. Alternatively should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, they are invited to telephone the undersigned.

Respectfully submitted,



Michael S. Neustel (Reg. No. 41,221)
NEUSTEL LAW OFFICES, LTD
2534 South University Drive, Suite No. 4
Fargo, North Dakota 58103

October 14, 2005

Date

Telephone: (701) 281-8822
Facsimile: (701) 237-0544
e-mail: michael@neustel.com